

In the claims:

Claims 1 to 26 (canceled)

27. (currently amended) The method according to Claim 31 wherein said step of providing an added conductive region layer is selected from a group consisting at least in part of sputtering, evaporating, and plating.

28. (currently amended) The method according to Claim 31 wherein said step of fabricating a planar outer surface of said added conductive region layer comprises the step of depositing a second of said at least one added conductive layer by electroless plating.

29. (currently amended) The method according to Claim 31 wherein said step of fabricating a planar outer surface of said added conductive region layer comprises the step of depositing a second of said at least one added conductive layer by screen printing.

30. (currently amended) The method according to Claim 31 wherein said step of fabricating a planar outer surface of said added conductive region layer comprises the step of depositing a second of said at least one added conductive layer by using the method of support by islands of protective overcoat.

31. (currently amended) A method for fabricating a semiconductor assembly comprising the steps of:

providing a semiconductor chip having a planar active surface including an integrated circuit, said integrated circuit having metallization patterns including a plurality of contact pads at said planar active surface,

providing a protective overcoat over said planar active surface, said protective overcoat including windows exposing said plurality of contact pads, said windows having sidewalls;

providing an added conductive region having at least one conductive layer on said metallization pattern covering and conformal to each of said contact pads, said sidewalls of said windows and a portion of said protective overcoat surrounding said windows, said added conductive region ~~layer~~ having a planar outer surface, said outer surface of said ~~added outer~~ conductive region ~~layer~~ suitable to form metallurgical bonds without melting;

providing an assembly board having a plurality of planar, metallurgically bondable terminal pads in a distribution aligned with the distribution of said contact pads;

aligning said added metallization and said board pads so that each of said contact pads are connected to a corresponding board terminal pad; and

metallurgically bonding said chip metallization and said board pads without melting said outer surface of said added conductive region ~~layer~~.

32. (previously presented) The method according to Claim 31 wherein said bonding comprises one of the following assembly techniques:

direct welding by metallic interdiffusion;

attaching including solder paste;

attaching including a conductive adhesive.